



May 13, 2021

Mr. Austin F. Callwood, Director
Division of Environmental Protection
Department of Planning & Natural Resources
45 Mars Hill
Frederiksted, V.I. 00840-4474

SUBJECT: East Fuel Gas H₂S Exceedance – May 6, 2021

Dear Mr. Callwood:

This letter is submitted in compliance with Condition No. 2.4.5.1 of the Limetree Bay Title V permit as a follow-up to the email notification to Ms. Verline Marcellin of the Division of Environmental Protection on May 6, 2021 at 5:00 PM regarding the H₂S exceedance event at the east fuel gas system.

The Continuous Emissions Monitoring System (CEMS) recorded H₂S concentrations in the fuel gas in excess of 0.1 gr/dscf (162 ppm) based on a 3-hr rolling average (ref. Title V permit condition 3.2.2.1.11) from 3:00 PM to 11:59 PM on May 6, 2021.

The following table provides 3-hr H₂S data during the event.

Source		EASTFGDR
Parameter	Unit	H2SPPM (PPM)
05/06/21	13:00	133
05/06/21	14:00	154
05/06/21	15:00	181
05/06/21	16:00	175
05/06/21	17:00	181
05/06/21	18:00	223
05/06/21	19:00	290

Source		EASTFGDR
Parameter	Unit	H2SPPM (PPM)
05/06/21	20:00	332
05/06/21	21:00	331
05/06/21	22:00	271
05/06/21	23:00	191
05/07/21	00:00	97
05/07/21	01:00	67

On May 6th, 2021, starting around 2:00 PM, the H₂S in the fuel gas started increasing. Operations saw no changes in the operation of the amine unit and eventually took several colormetric tube samples of the fuel gas at the fuel gas balance drums (D-3307 & D-3354) and low-pressure contactor (T-4850) at the No. 2 Gas Recovery Unit (2GRU). The samples showed H₂S concentrations that were not consistent with the H₂S concentrations recorded by the CEMS. In most cases, the colormetric tube samples were detecting H₂S in concentrations below the emission limit. As a precaution, the No. 6 Distillate Desulfurizer Unit (DD6) and DD7 were placed on 100% circulation and DD9 was on 75% circulation. The analyzer technicians were also called in and are currently working with the CEMS vendor to troubleshoot potential issues with interferences in the analyzer. Operations recently discovered a passing bypass valve from T-4850 that may have been sending off gas to the treated fuel gas. Operations is still investigating. The units are currently down.



LIMETREE BAY
REFINING, LLC

If you have any questions or need additional information, please contact Maria Aloyo at (340) 692-3781.

Sincerely,

Neil Morgan
VP, Refinery and General Manager
Limetree Bay Refining, LLC

Electronic Copy: Verline Marcellin (DPNR)
Robert Buettner (EPA)
Patrick Foley (EPA)
Harish Patel (EPA)